

胸腹部急症CT介紹及判讀

國軍高雄總醫院左營分院 放射科 張維方醫師

三軍總醫院放射診斷部 住院醫師

三軍總醫院放射診斷部 總醫師

國軍高雄總醫院左營分院放射科 總醫師

高雄榮民總醫院放射線部 進修醫師

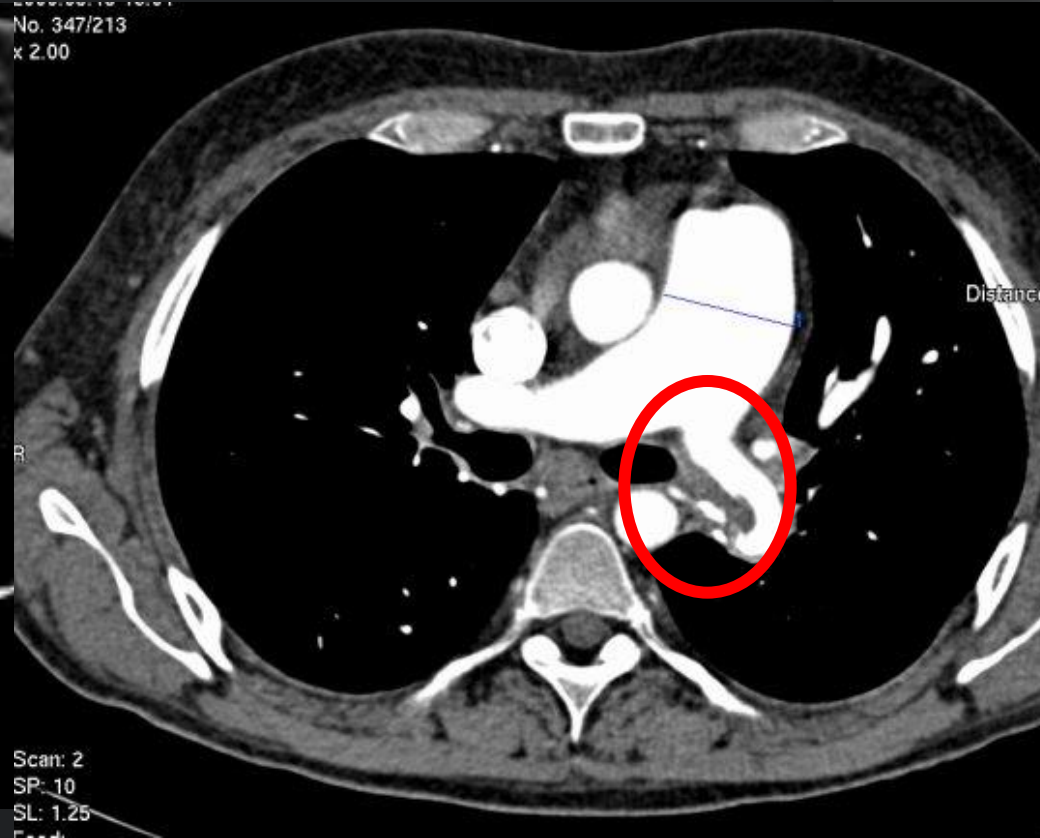
怎麼學會看CHE/ABD CT最快

- ◎ 私下先問初步報告! 不能假手他人
- ◎ 再看放射科報告!!

胸部急症CT

- 基本anatomy
- 判讀步驟
- 常見診斷
 - Pneumothorax
 - Pneumomediastinum
 - Aortic dissection
 - Pulmonary embolism

基本anatomy



判讀步驟

- ◎ Lung window

- ◎ 右肺

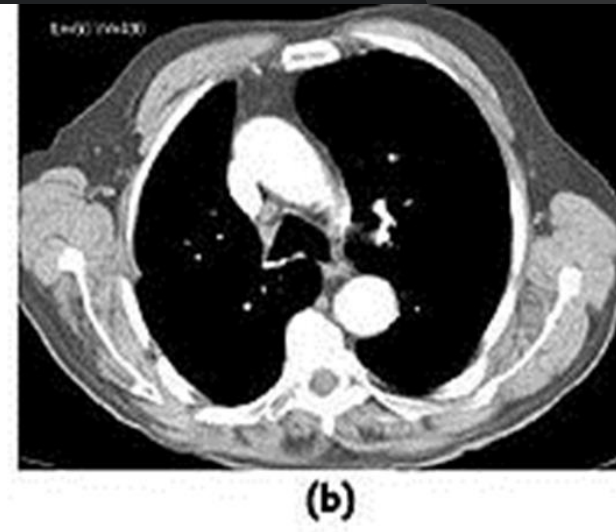
- ✓ 有無pneumo

- ✓ 有無focal lesion

- ◎ 左肺

- ✓ 有無pneumo

- ✓ 有無focal lesion

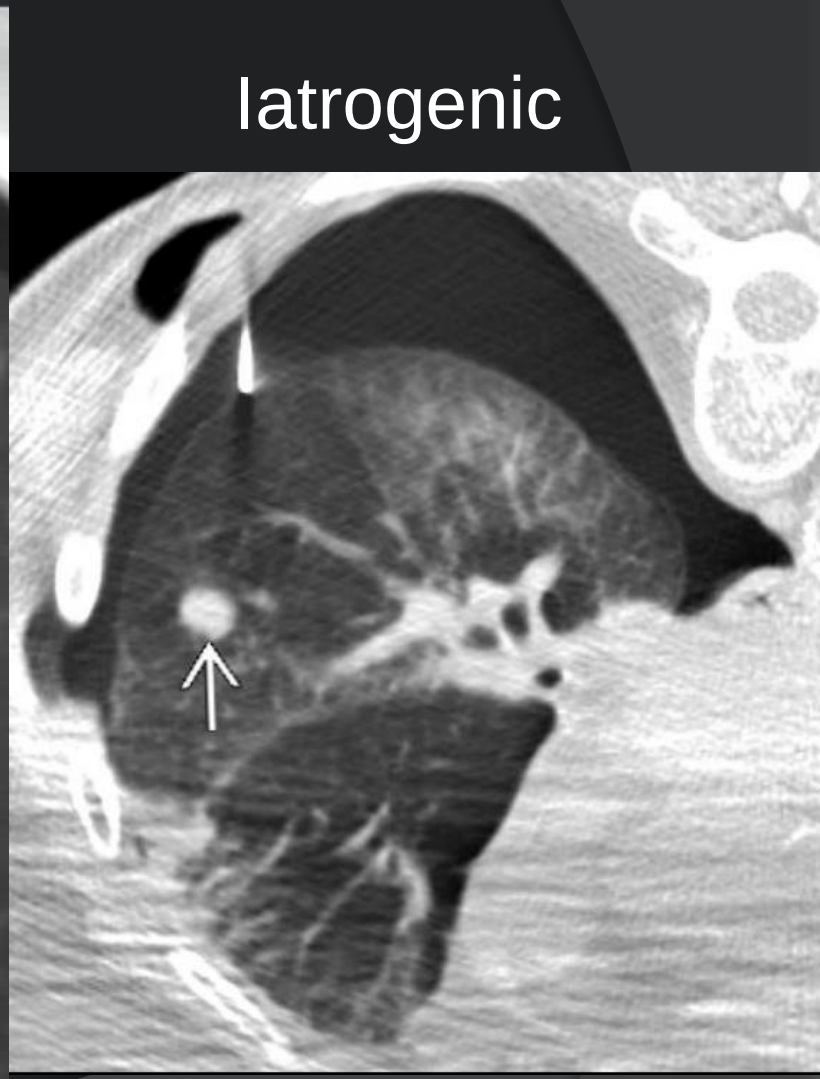
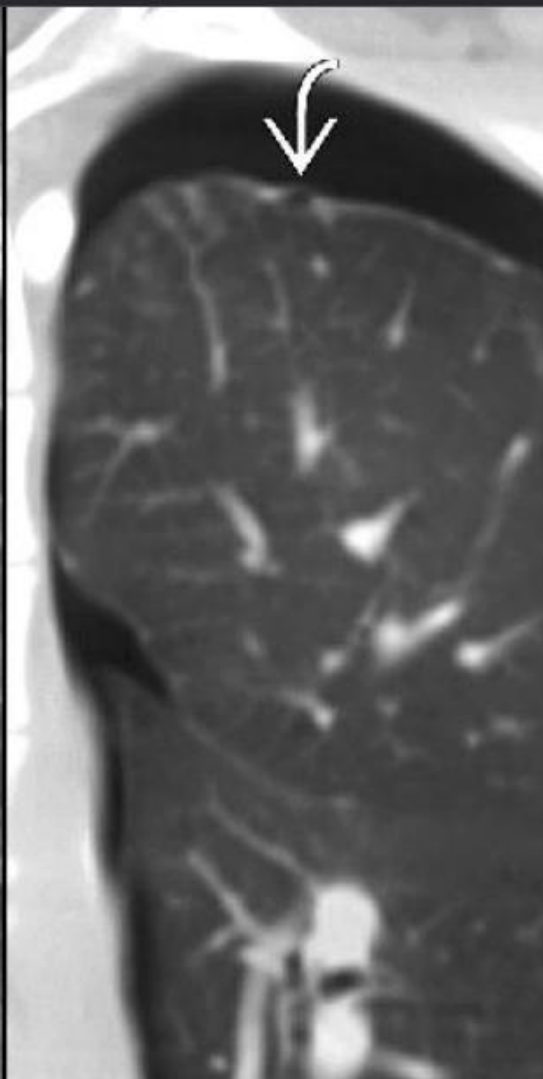


- ◎ Soft tissue window: mediastinum: mass or lymphadenopathy

- ◎ Bone window: 有無fr, bone tumor

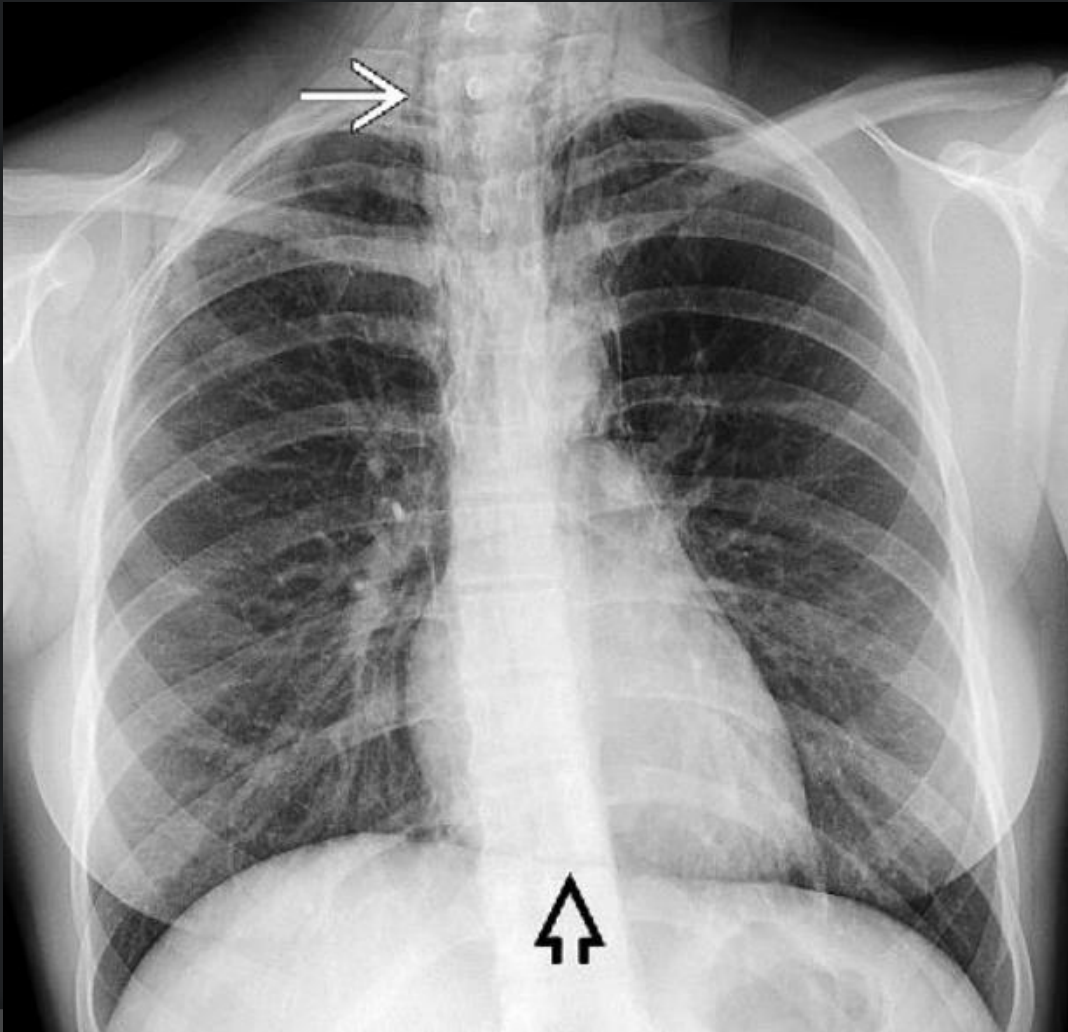
- ◎ Liver, spleen, kidneys

常見診斷-Pneumothorax



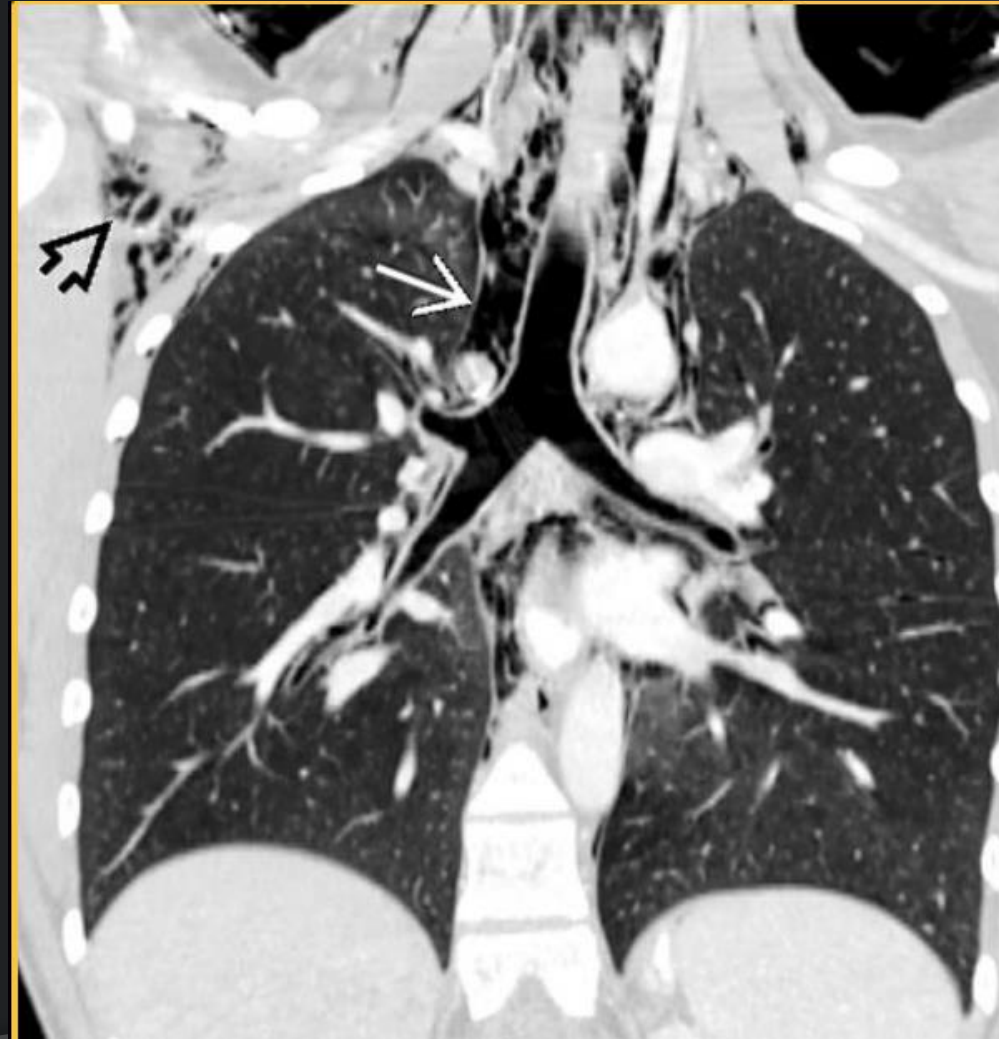
Iatrogenic

F/18, after play basketball



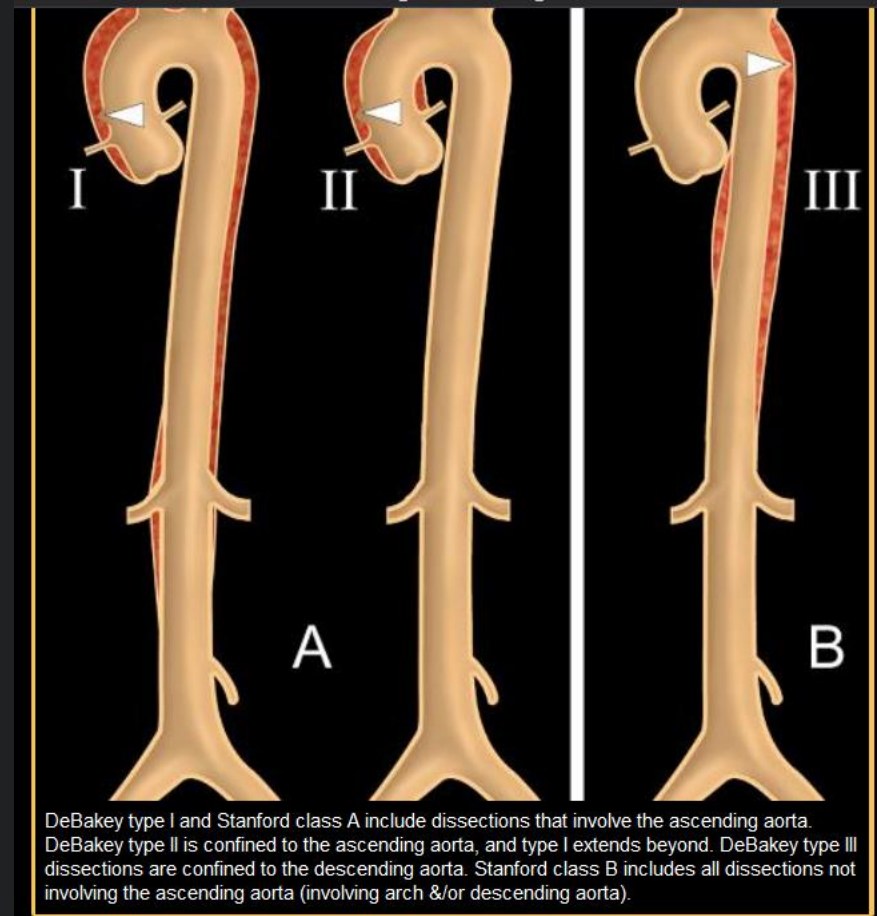
Pneumomediastinum

- Air within mediastinum
 - Spontaneous: Alveolar rupture and air dissection from pulmonary interstitium
 - Traumatic: Tracheobronchial/esophageal tear



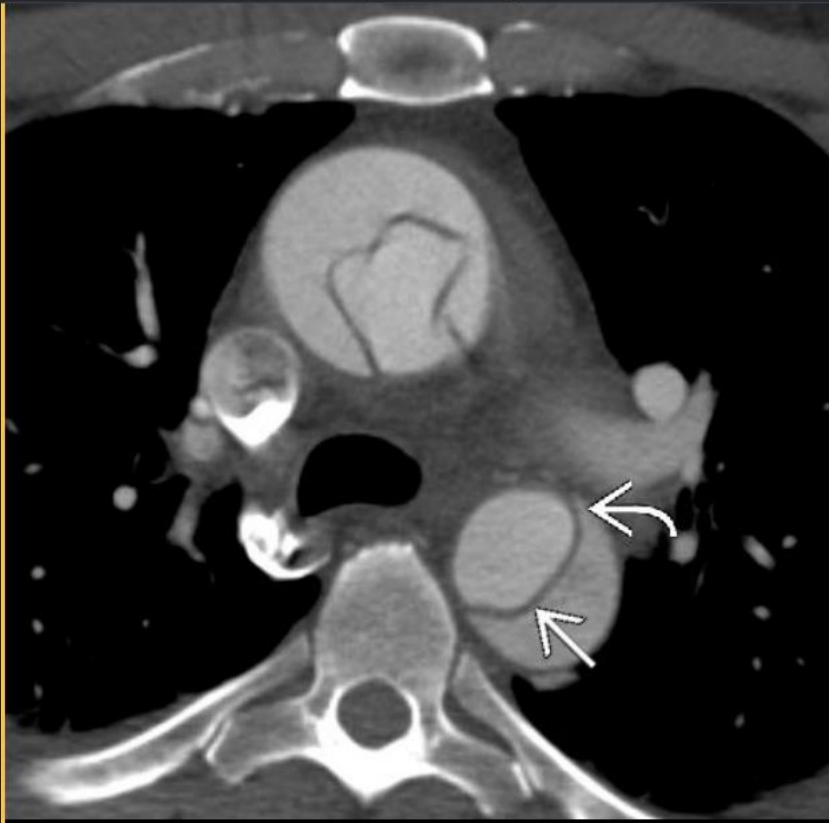
Aortic dissection 痛

- 2 distinct lumina (false and true)
- False lumen: Larger cross-sectional area and delayed enhancement
- True lumen: smaller cross-sectional area, continuity with undissected portion of aorta



是真是假？

為什麼放射科人這麼
好？

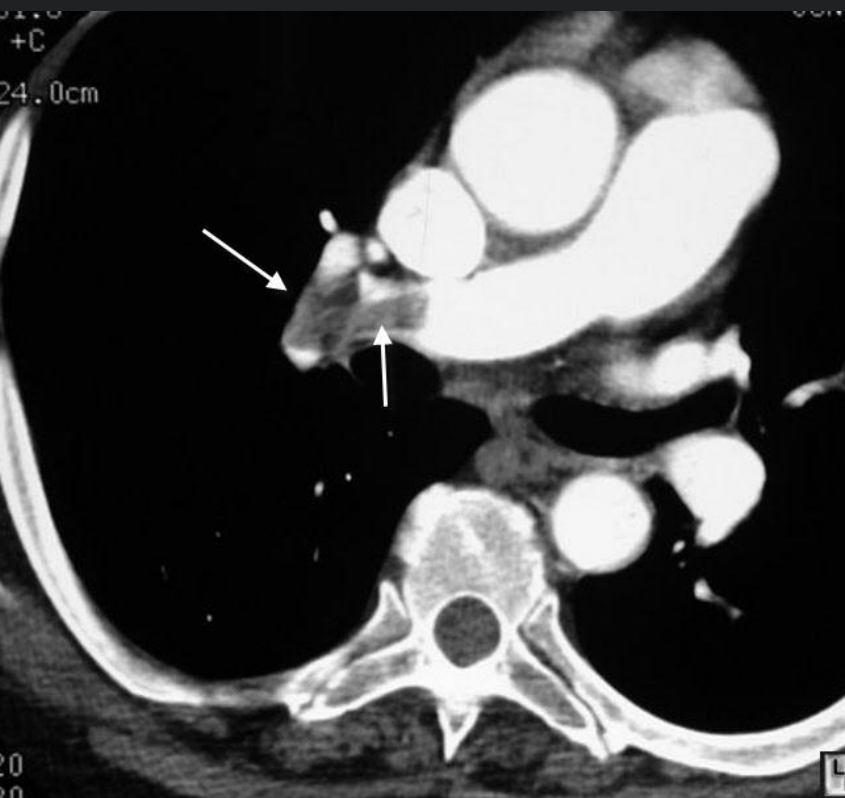


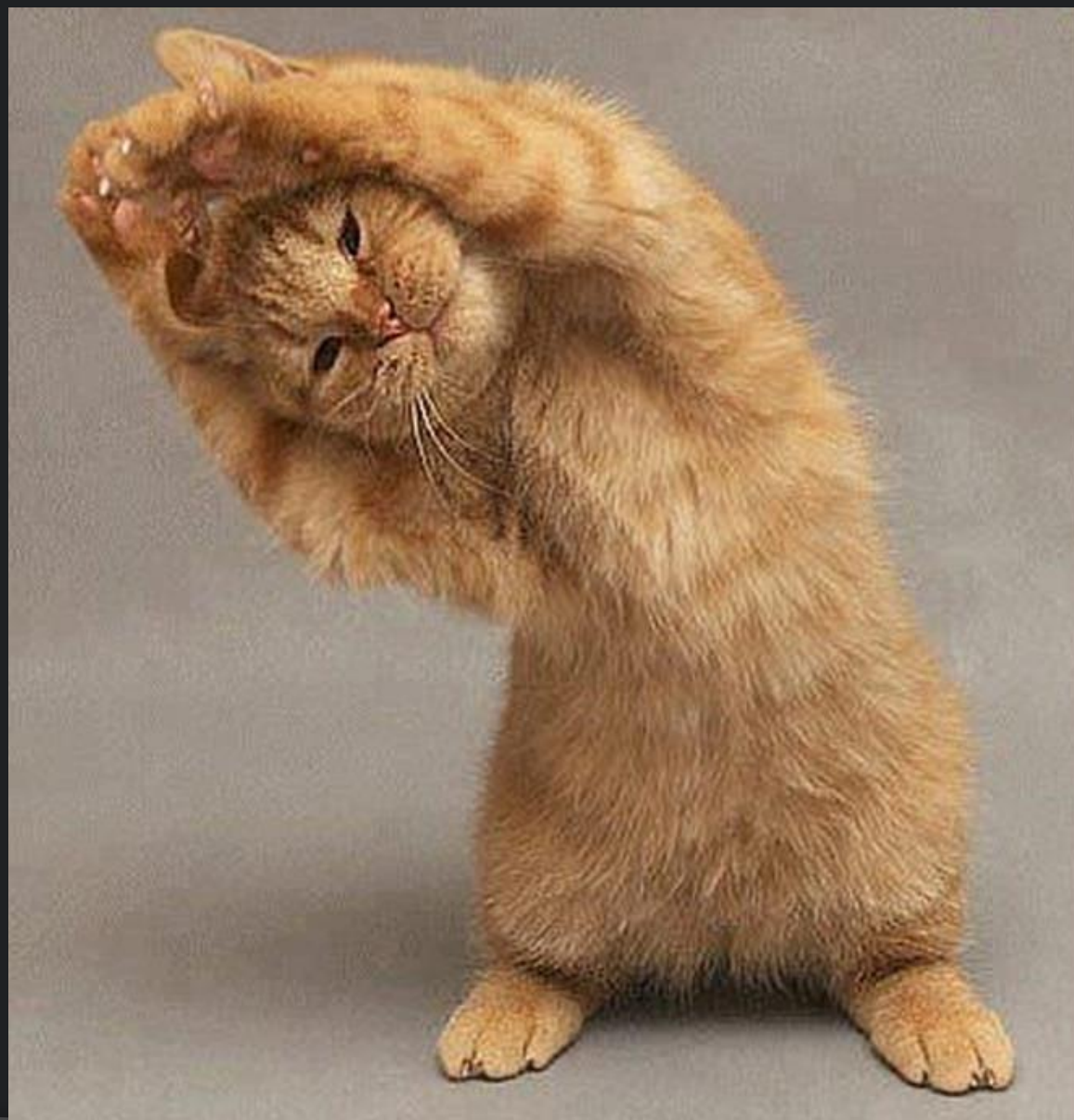
Sagittal CTA shows a dissection. False lumen (black open) compresses true lumen (black arrow). The true lumen supplies the celiac axis (white open) and superior mesenteric artery (white arrow).

Pulmonary embolism

- 肺栓塞是指部分的肺臟血管被血管內的固體、液體或空氣塊所形成的栓子阻塞，導致肺臟組織血液灌流不足造成低血氧。

喘





腹部急症CT

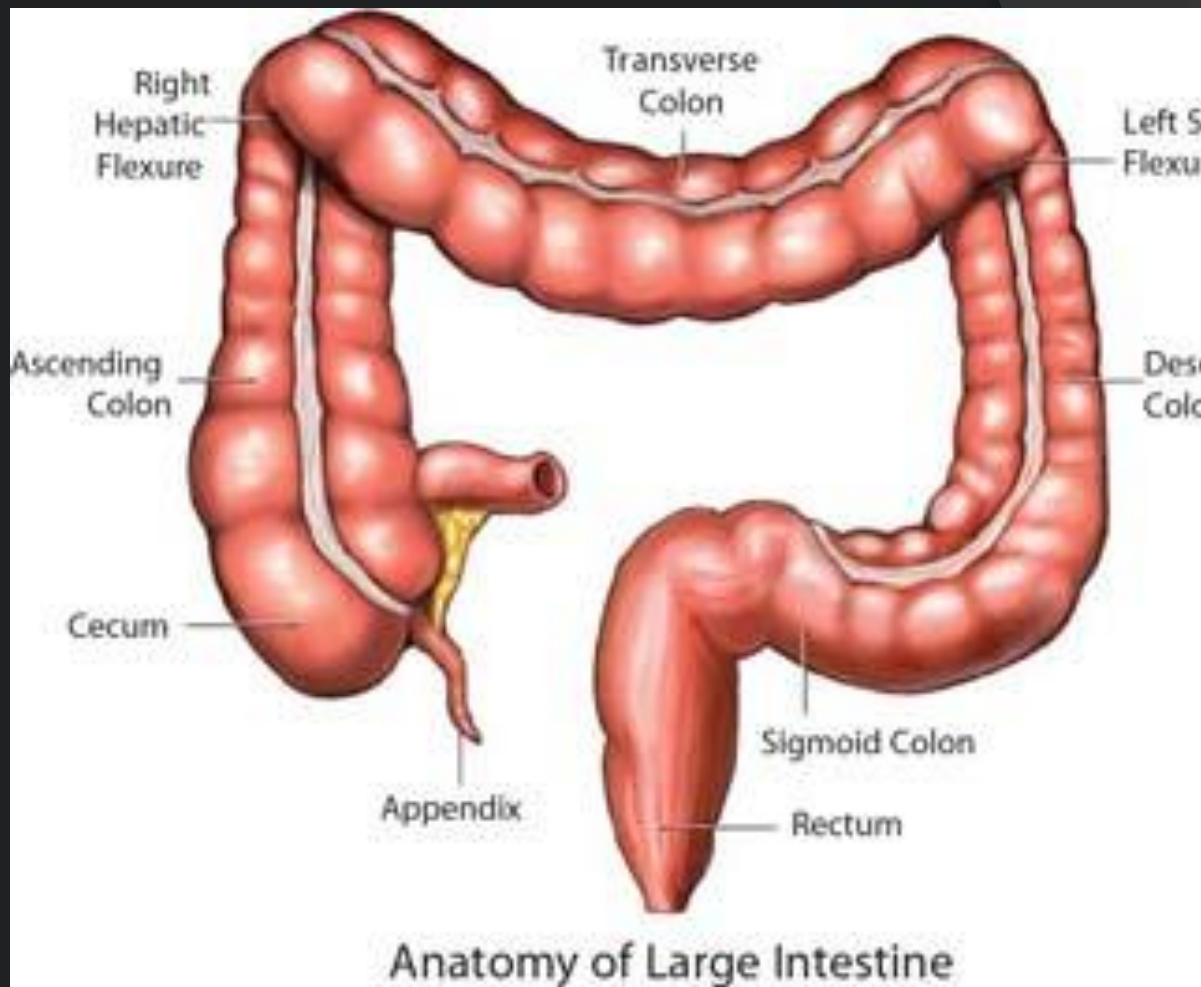
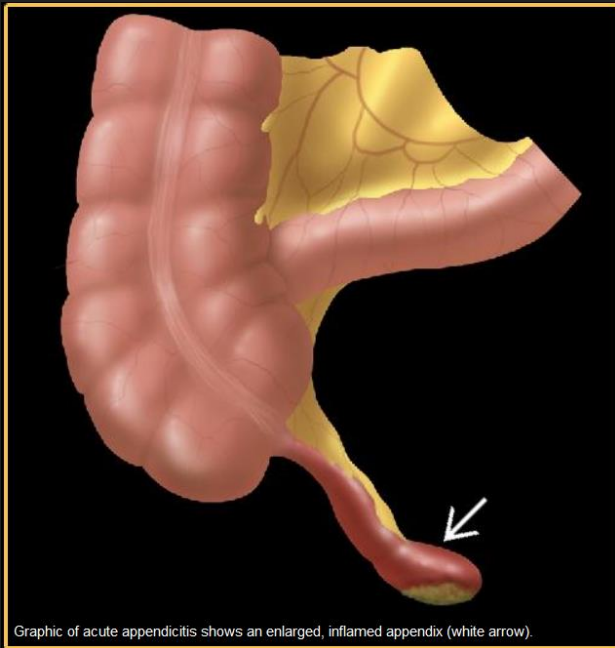
- 基本anatomy
- 要看哪些東西
- 判讀步驟
- 常見診斷- Acute appendicitis, Pneumoperitoneum, Acute Cholecystitis, solid organ laceration, Aortic aneurysm rupture
- 照的到但看不到

基本anatomy

要看哪些東西 判讀步驟

- ◎ 基本anatomy-哪裡找解剖書來對照
- ◎ liver, Gb, right adrenal/kidney, left adrenal/kidney, pancreas, spleen, bowel, Ub
- ◎ Lung window- bil lower lung field
- ◎ Soft tissue window- one by one
- ◎ Bone window

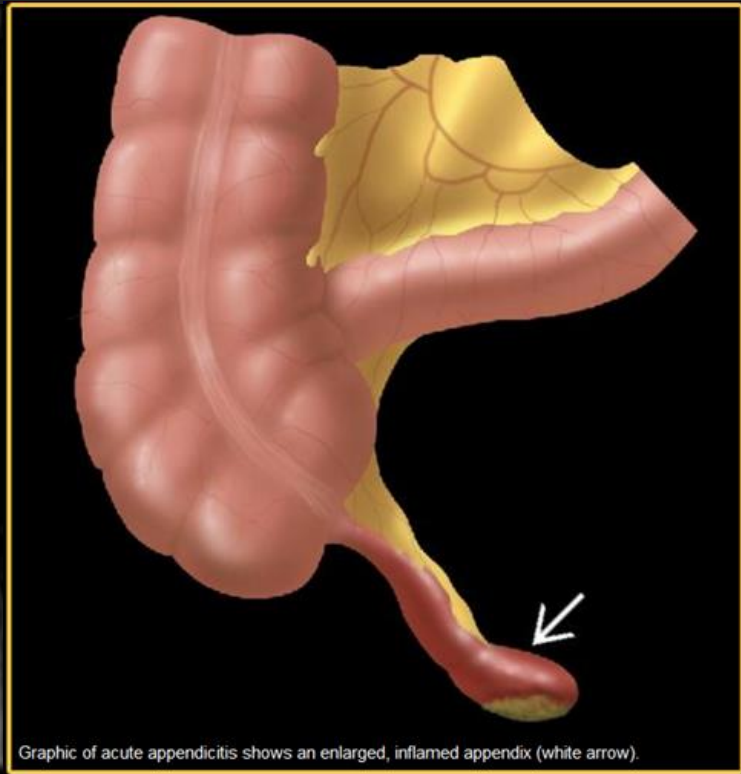
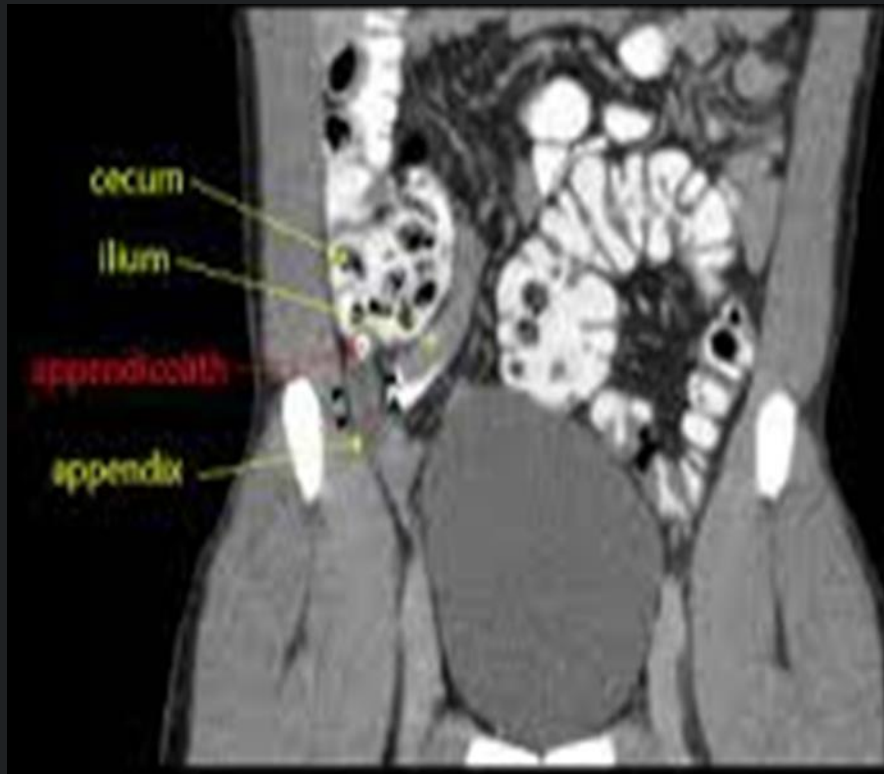
常見診斷- Acute appendicitis



● Acute appendicitis

-
- Dilated appendix ≥ 7 mm
- Periappendiceal fat stranding
- appendicolith may be present
- focal bowel wall thickening of cecal tip or terminal ileum





pneumoperitoneu

◎ 記得換window檢查

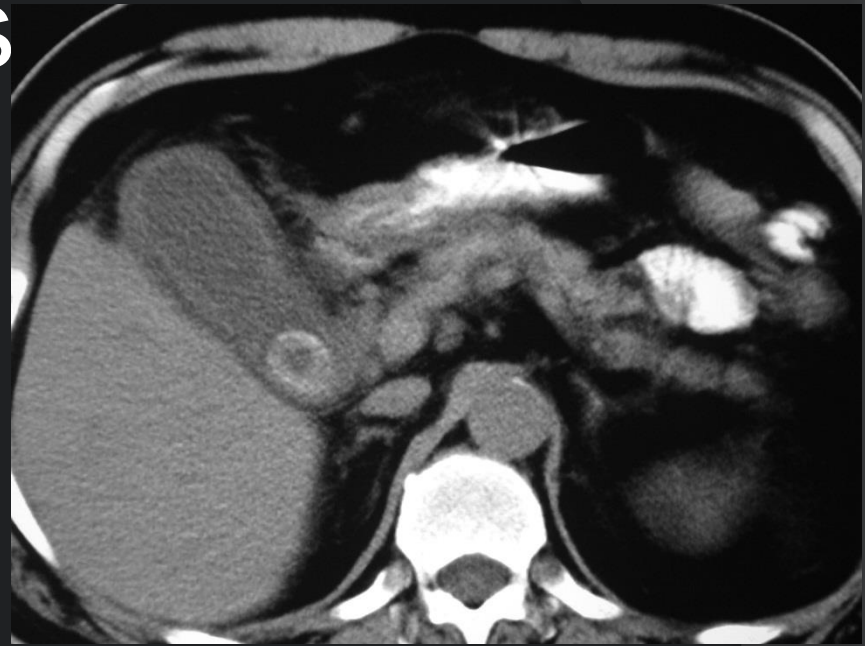


Fig. 10 Intestinal perforation. Axial CT scan (a) and multiplanar sagittal reconstruction (b) show the presence of pneumoperitoneum, which is more evident with a lung window



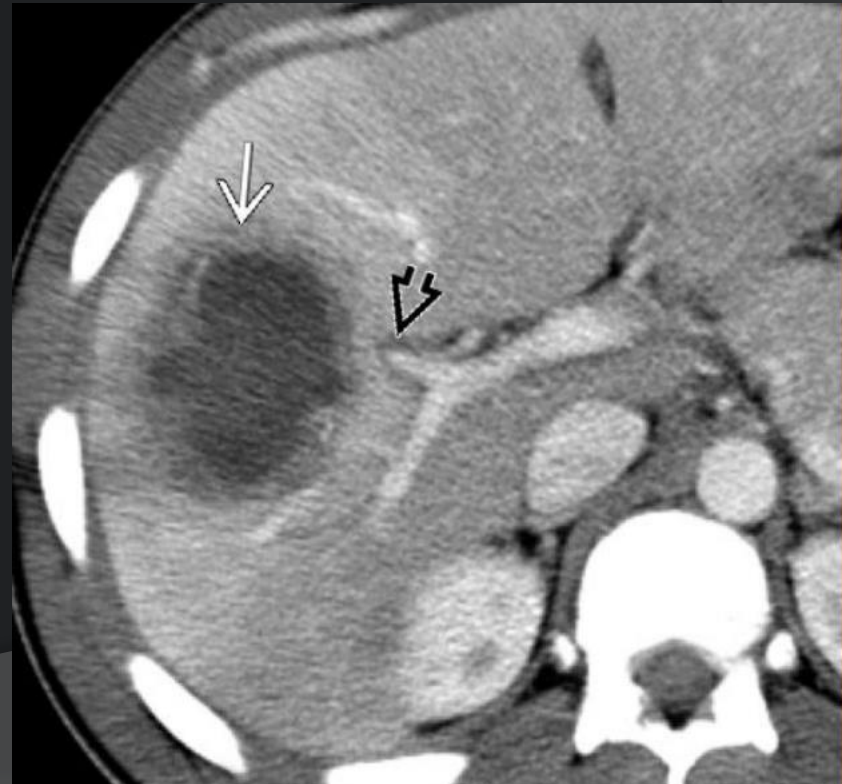
Acute Cholecystitis

- Gall stones +/-
- Gallbladder wall thickening ($> 4\text{mm}$)
- Gallbladder distension ($> 4\text{cm}$)
- Peri-gallbladder fatty infiltration
- Clinical condition: fever, leukocytosis, and RUQ pain



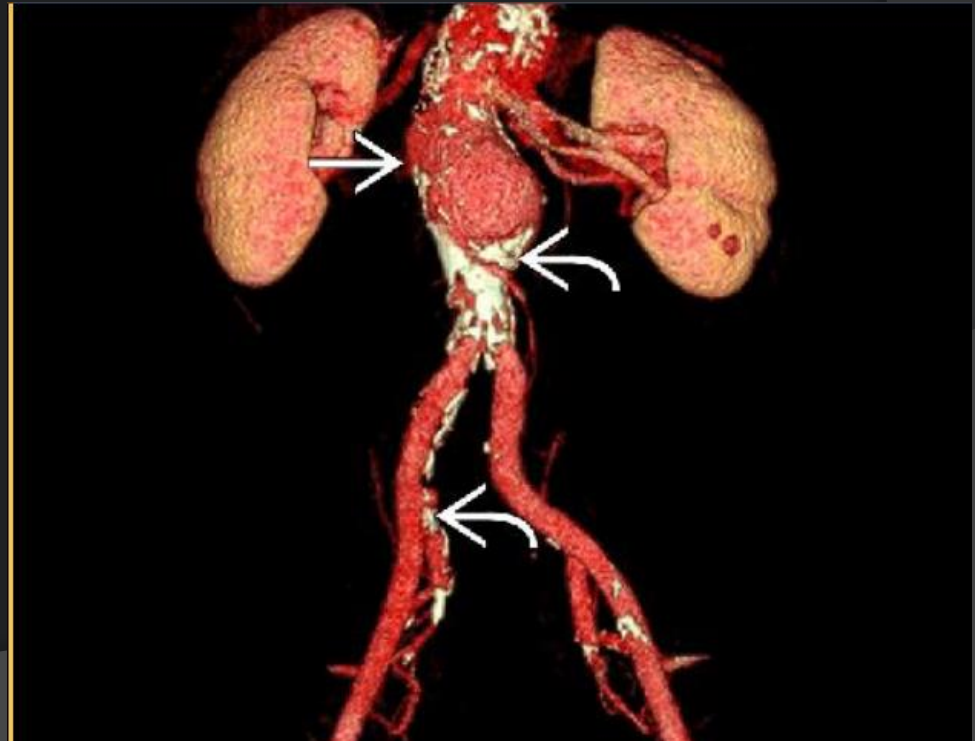
Liver laceration

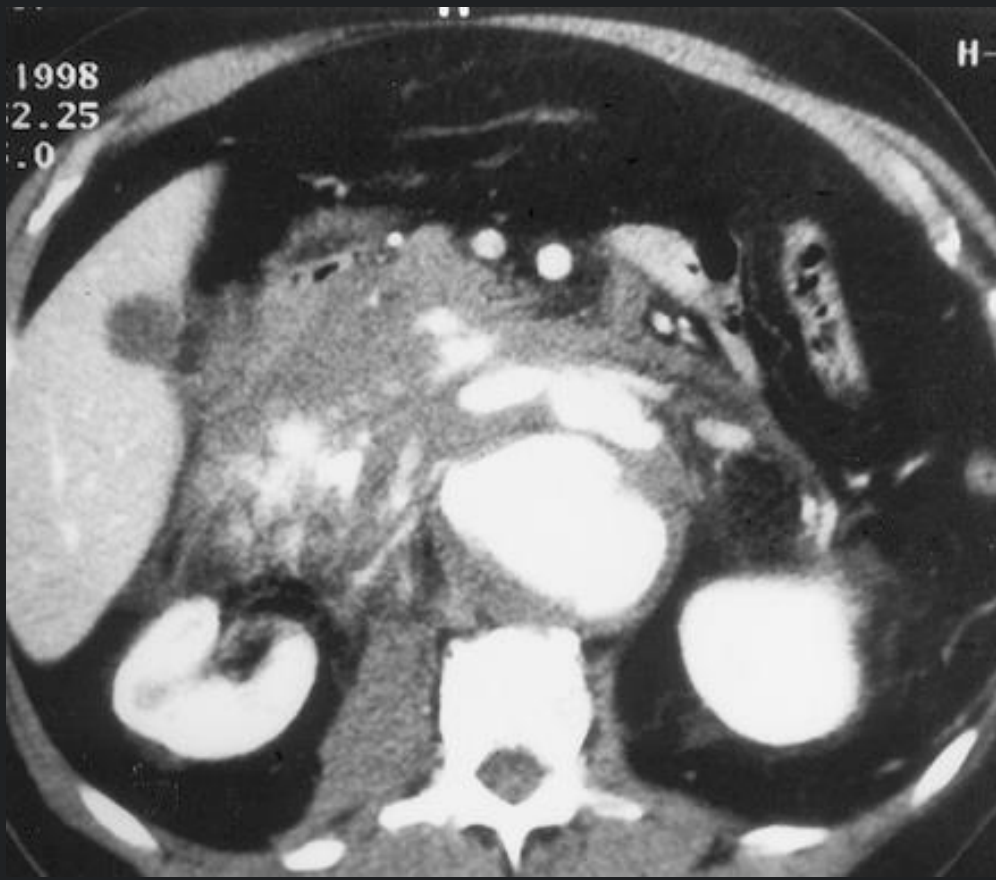
- 33-year-old man involved in a motor vehicle accident.
- Any possibility? ddx with liver abscess, enhancing capsule+/-



Abdominal aortic aneurysm

- infrarenal aorta ≥ 3 cm
- Rupture : mortality rates approaching 95%. (40% die within 1 hour).
- Aneurysm size: 30%–40% of > 5 cm aneurysms, aneurysm will rupture within 5 years of detection.
- Chronic abdominal pain.
- and pulsatile mass





Ruptured abdominal aortic aneurysm in a 69-year-old man



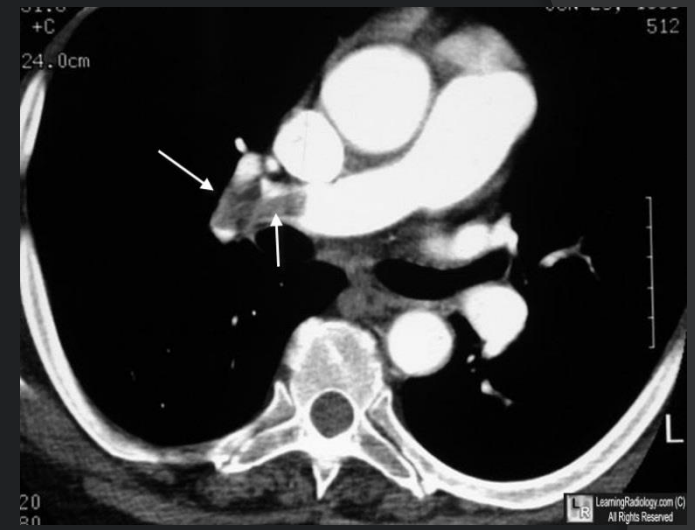
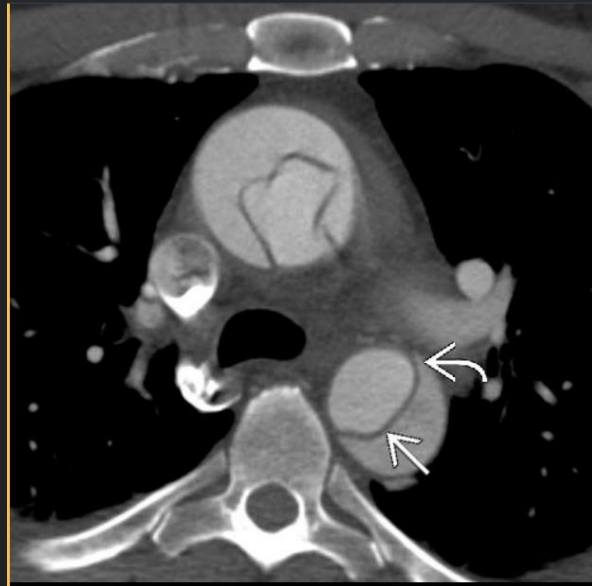
Ruptured abdominal aortic aneurysm in an elderly man.

照的到但看不到

- ◎ Stomach
- ◎ Small bowel carcinoma
- ◎ - Inadequate gastric or bowel distention limits diagnostic evaluation and poses a potential pitfall

Take home message

● CHE



● ABD

